Meet Tomorrow's Mobile Phones: Ma Bell wouldn't recognize these cool concept phones – or the technologies behind them. PAGE 34

COMPUTERWORLD®

How to Get More Out of ITIL

Performance tips from users who have test-driven Version 3. Page 28

* Master *

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JULY 21, 2008
VOL. 42, NO. 29 $5/COPY

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IT managers could learn a lot from the user focus of Web 2.0 developers. PAGE 12

The economic news keeps getting worse. But that has yet to result in a buyer's market for IT. PAGE 16

THE GRILL: Robert Madge describes how his once high-flying company crashed and how leadership strengths can also be weaknesses. PAGE 22

Opinion

Microsoft needs to get its mojo back – and buying Yahoo isn't the way to do it. PAGE 26

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ON THE MARK: The real energy hog in your data center may be your UPS. PAGE 18

Managing the IT budget is a key part of your job these days. Here are six fiscal mistakes to avoid. PAGE 32

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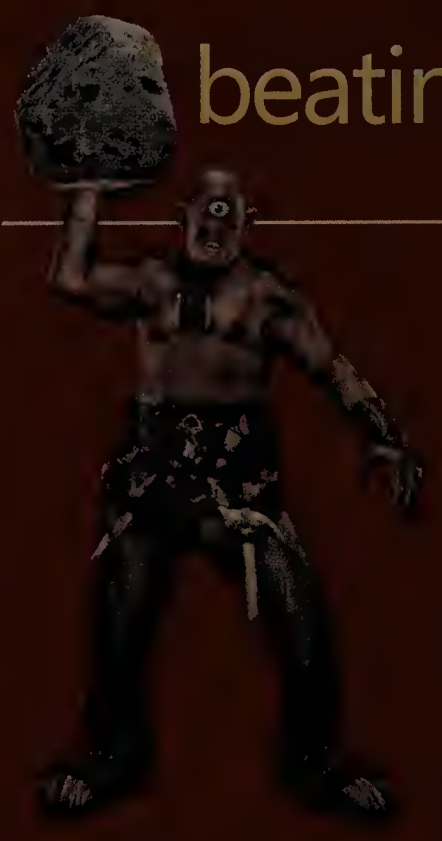
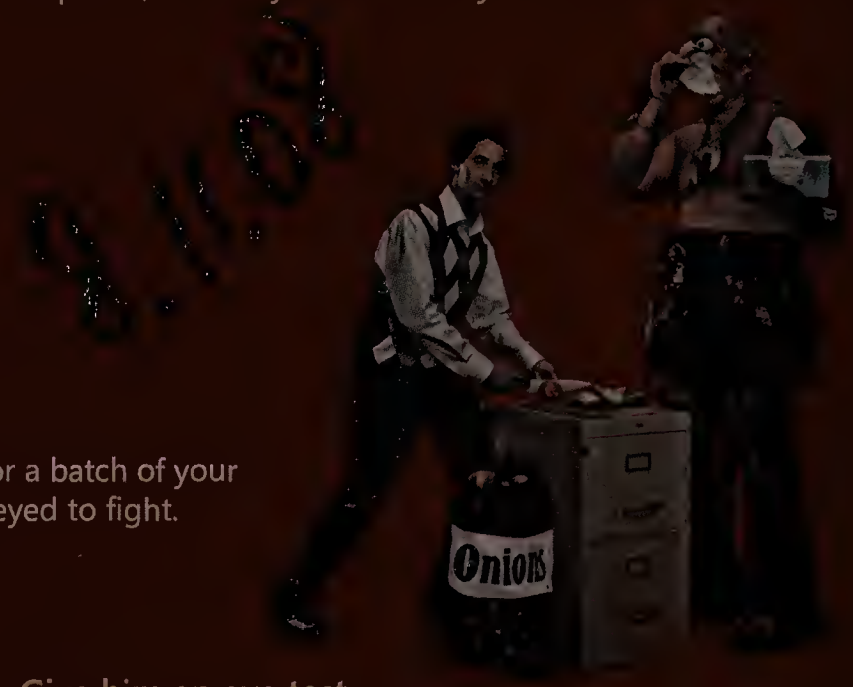
Microsoft

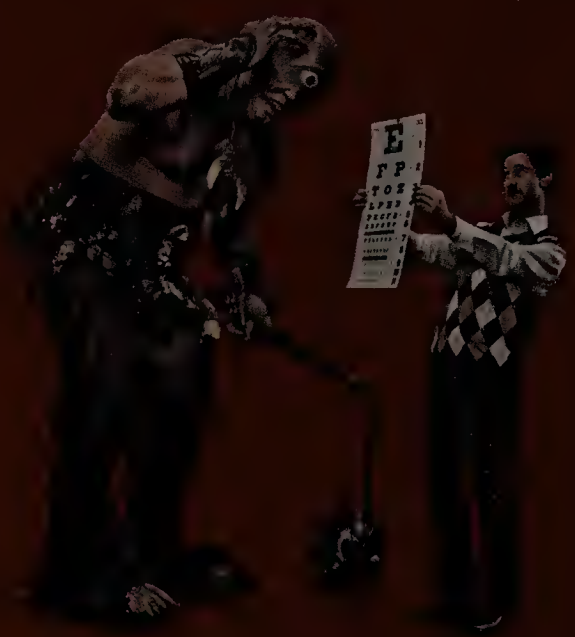
beating back a cyclops. easy.



1. Fight.
But there's no shame in running. The Cyclops plans to kill you, tear you to pieces, and eat you. Survival is job number one.



2. Drive him to tears.
Start chopping onions, and tell him it's for a batch of your award-winning chili. He'll be too bleary-eyed to fight.



3. Give him an eye test.
Tell him he'll need a monocle, which you happen to have in the back room, then simply slip out the back.

4. Use the classics.
A banana peel, strategically placed, is still hard to beat. Lure the Cyclops to his slippery doom, then run.

5. The flashlight gambit.
A bright light shined into his retina may blind him long enough to afford your escape. It might also just make him angrier, so be careful.

6. Show a little tenderness.
Maybe the Cyclops is sensitive about his frankly odd looks. Maybe that's why he's so angry. Try a hug.

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Forefront is business security software for client, server, and the network edge.

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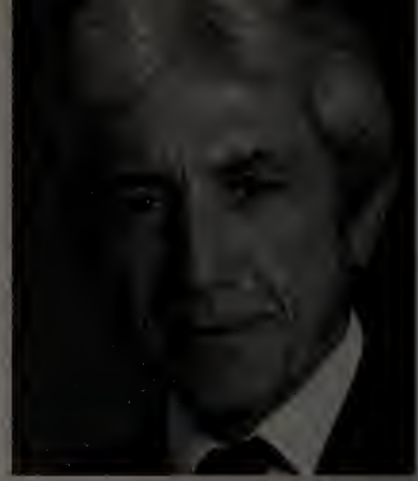
■ EDITOR'S NOTE

Don Tennant



Raining Mud

I'LL ADMIT that when I walked into the George R. Brown Convention Center in Houston a couple of weeks ago on the opening day of the Microsoft Worldwide Partner Conference, I did so with a preconception. I was fairly certain that the topic of utmost concern to those partners — resellers, systems integrators, independent software vendors and the like — would be the Windows Vista embarrassment. I was wrong.

That's not to say Microsoft still doesn't have plenty of hearts and minds to win over for Vista, even among its closest allies.

"Personally, I can't stand it," said Aaron Nettles, president and CEO of Vorsite, a Microsoft Gold Certified Partner in Seattle. "It just seems more unstable to me, and I can't stand not being productive."

Sonic Solutions, a Novato, Calif., vendor best known for its Roxio digital media software line, received Microsoft's 2008 Partner of the Year award, and Michael Demeyer, the company's vice president of OEM products, sat on a panel that discussed the Vista certification process. Imagine the red faces in the room when Demeyer mentioned how he obtained his copy of Vista.

"Our internal IT department still doesn't support Vista. I had to go to CDW with my Amex card," Demeyer said. "They haven't gone [to Vista] yet, just like many IT departments."

Still, I spoke with just as many partners who couldn't praise Vista highly enough.

Rob Oud, CEO of CAD & Co., a Microsoft Gold Certified Partner in Amsterdam, said his company has rolled out Vista, and he's especially impressed with Mobility Center and Vista's search capabilities.

"You know when you like it most?" Oud asked rhetorically. "When you go back on an old computer."

Oud, like most of the partners I spoke with, said it wasn't Vista at all that he was most concerned about. What's really on his mind is software as a service.

There was no question about it. It didn't take me long to realize that SaaS, not Vista, was causing most of the angst in Microsoft's partner community.

■ Oddly, almost eerily, no one from Microsoft ever used the term 'software as a service' in any public forum.

Oud expressed frustration that Microsoft hadn't done anything of substance with SaaS. He said people are "scared to death" to implement new systems because of the cost and complexity. SaaS, he said, would advance innovation and the uptake of new technologies.

Stephen Roux, president of Innovative Computer Systems, a Microsoft Gold Certified Partner in Farmington, Conn., said SaaS is easily his biggest concern. "It's something that [Microsoft] has tiptoed around for a long time," he said. "We need a little clarity, a little help."

That "clarity" came in quintessentially Microsoft fashion, muddying the waters.

As it turned out, Microsoft used the conference as a forum to respond to the nagging SaaS question. But oddly, almost eerily, no one from Microsoft ever used the term "software as a service" or the SaaS acronym in any public forum where I was present. Instead, the incessant drumbeat was on the slightly offset term, "Software + Services," coined by Microsoft.

I asked Allison Watson, Microsoft's corporate vice president in charge of the worldwide partner group, whether it was intentional to avoid the term "software as a service."

"Yeah, very intentional," Watson responded. She said Microsoft sees the concept of SaaS as "way too limiting." The Software + Services model, she explained, is a blending of SaaS — where the software resides in the cloud — and the provisioning of software on rich-client devices, so customers have a choice of delivery.

That's fine. The problem is that Microsoft's strategy is to trivialize SaaS and replace it with its own concoction, which will do nothing but confuse the issue. Watson even claimed with a straight face that SaaS was the rage two years ago and that now even Microsoft's competitors are talking about "Software + Services." That's sheer nonsense.

Microsoft needs to be OK with being under the cloud with the rest of us, rather than demanding to reign above it. Otherwise, it's just going to rain more mud. ■

Don Tennant *is editorial director of* Computerworld *and* InfoWorld. *Contact him at don_tennant@computerworld.com, and visit his blog a* http://blogs.computerworld.com/tennant.

RESPONSES TO:

Should 'Spam King' Soloway Pay the Price for Worse?

July 11, 2008

The punishment does fit the crime. Spam is theft — spammers take up space on my servers, they take up bandwidth on my Internet pipes, and they make me buy more hardware to filter their junk out.

We need to make an example of a few spammers.

■ **Submitted by:** *Dan*

His lawyer is correct; he should get only five years — for each e-mail.

■ **Submitted by:** *Trollicus*

I work as a systems administrator for a small firm, and spam is one of the worst problems we have. On an average day, we receive 15,000 junk e-mails. What a waste of time and money trying to filter out the bad e-mails from the good.

The cost of his crimes is probably hundreds of times more than what he swindled, when you consider missed orders that were caught in spam filters, and the cost of anti-spam hardware and software.

■ **Submitted by:** *Anonymous*

RESPONSE TO:

Microsoft Warns Users of Coming Update to Windows Update

July 7, 2008

About the only Windows automatic update that I ever want to be a part of again is the one that will update Vista to not-Vista. Any news on when that one is coming?

I used to be a big defender of Microsoft. Now I just get that sick, nasty feeling in my stomach every time I see one of my machines boot.

And every time I see a new Microsoft update installed and I have no idea what it really is, I am filled with disgust, a little bit of rage and a lot of hopelessness.

■ **Submitted by:** *Thomas White*

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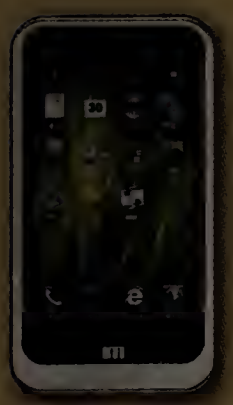


11 Cool New Apps for The iPhone

Whether you bought a brand-new iPhone 3G or updated a first-generation model with iPhone 2.0 firmware, you're going to want to try out some of these must-have applications.

Online Office Apps Finally Get Serious: Google Docs vs. ThinkFree vs. Zoho

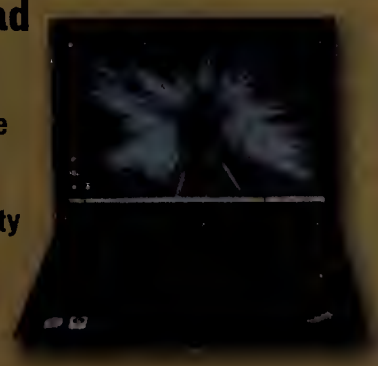
Web-based productivity suites, once almost a contradiction in terms, have become real challengers to desktop applications. Our reviewer names the contenders in different realms of the office.

Opinion: Microsoft Hyper-V RTM Edition Outperforms Its Predecessors

In one test, the version of the hypervisor that Microsoft released to manufacturing was able to saturate the hardware enough to achieve 97% of the storage performance of a physical server.

Ultrathin Laptop Showdown: Three Popular Models Go Head-to-Head

Which is really the best ultrathin notebook? We put the MacBook Air, the ThinkPad X300 and the Toshiba Portege R500 through rigorous usability tests to find out.



The ThinkPad X300

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News Digest

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THE WEEK AHEAD

MONDAY: Apple plans to report its Q3 results. Also due to issue earnings reports are Yahoo and VMware on Tuesday, and the latter's parent company, EMC, on Wednesday.

MONDAY: The O'Reilly Open Source Convention opens in Portland, Ore. An Ubuntu Linux user conference was supposed to be collocated with Oscon, but it has been canceled.

TUESDAY: A final day of testimony is scheduled in Seattle in the sentencing hearings of "spam king" Robert Soloway.

NETWORK MANAGEMENT

San Francisco IT Admin Locks Up City Network

IDG NEWS SERVICE

TERRY CHILDS (above) is being held on a $5 million bond on charges that he tampered with San Francisco's backbone network.

A NETWORK administrator late last week pleaded innocent to charges that he locked up a key city of San Francisco computer network and refused to disclose the passwords he set.

San Francisco District Attorney Kamala Harris' office charged that Terry Childs, 43, reset passwords to the switches and routers in the city's fiber WAN, rendering it inaccessible to administrators. He also "set up devices to gain unauthorized access to the system," it added.

Childs, a network administrator with the city's Department of Telecommunication Information Services (DTIS), was arrested July 13 and arraigned last Thursday in San Francisco Superior Court. He was ordered held on a $5 million bond until a hearing slated by Judge Paul Alvarado for July 23. Childs faces seven years in prison.

Late last week, the city still lacked the passwords needed to regain control of the network's Cisco Systems Inc. equipment. But the backbone network was operating normally, said Ron Vinson, DTIS chief administrative officer. The WAN connects computers in buildings throughout the city and carries about 60% of the municipal government's traffic.

Vinson said he couldn't predict when the problem would be fixed. "We feel very confident that we will have full access," he said.

Vinson said the city is working with Cisco to repair the problem. If the hardware has been tampered with, replacement costs could easily reach $250,000, he added.

Harris said it's unknown why Childs allegedly tampered with the system. But a source familiar with the situation said the suspect's behavior had become erratic in the days leading up to his arrest.

San Francisco began rolling out the network about four years ago as a less-costly alternative to leased data lines. The city has so far spent more than $3 million on the system. Vinson said the tampering was discovered several weeks ago during an assessment by a new security manager. "It was a little unnerving to discover that this person had created this fiefdom of access to our network," Vinson said.

Andrew Storms, director of security operations at security vendor nCircle Network Security Inc., said the city's IT managers may have been able to prevent the incident. "Some safety nets and best practices were probably overlooked if one person could have caused this much damage," he said.

— Robert McMillan, IDG News Service

CYBERCRIME

DBA Gets Jail Time for Data Thefts

A FORMER database administrator at Certegy Check Services Inc. who admitted that he stole and then sold the personal data of about 8.5 million consumers was sentenced to 57 months in prison by a federal judge in Florida this month.

In addition, the judge ordered William G. Sullivan to pay almost $4 million in restitution to consumers victimized by the data thefts.

The rogue DBA's duties at Certegy included defining and enforcing data access rights.

Sullivan pleaded guilty to felony fraud charges last November, four months after the thefts were disclosed by Fidelity National Information Services Inc., Certegy's parent company.

According to court records, Sullivan stole a variety of personal data from the company's databases over a five-year period that started in February 2002. The information was sold to data brokers through an intermediary, which paid Sullivan a total of $580,000.

– JAIKUMAR VIJAYAN

_INFRASTRUCTURE LOG

_DAY 37: Our data center is a thing of the past. Costs are up. Flexibility is down. We can't respond to our changing business needs. I think we've been left behind.

_I don't want to be left behind...not again.

_DAY 40: We're rethinking our data center with help from IBM. Their approach is efficient and flexible enough to meet our business demands. Now resources can be shared in a simplified, virtualized environment. We can scale quickly and provide rapid services delivery. It's just one step in IBM's plan for a new kind of data center.

_Flexibility is up. Costs are down. IT guy is elated.

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SOFTWARE

SAP Forcing Support Upgrades on Customers

SAP AG last week announced plans to "transition" all customers to its new enterprise-level support program as of Jan. 1, 2009. The change will provide some customers with increased levels of service but also make them pay higher fees.

The vendor said that its Enterprise Support offering, unveiled in February and rolled out in May, will replace its Standard and Premium support options.

Some of the new features will be available to the transitioned customers immediately, but those users won't be charged the higher maintenance prices until Jan. 1, SAP added.

The prices will increase gradually from that point until 2012, when they reach the Enterprise Support list price of 22% of annual license fees. For example, a customer now paying 17% for standard support will see it rise to 18.3% in 2009 and then increase incrementally until 2012, the vendor said.

> **"I'm not going to tell you it's a good deal. . . . We don't like to pay more for anything.**
> **MIKE O'DELL,** CHAIRMAN, AMERICAS' SAP USERS' GROUP

Forrester Research Inc. analyst Ray Wang said in a report issued last week that the move was likely a response to competitive pressures from rivals like Oracle Corp. and a result of SAP's decision in April to cut its investment in the Business ByDemand suite of hosted ERP products. He noted that the latter action has "led to a major loss in potential revenue growth."

Wang recommended that SAP customers begin evaluating third-party maintenance providers and start prodding SAP user groups to protest the increases.

Mike O'Dell, chairman of the Americas' SAP Users' Group, said that ASUG members convinced SAP to boost prices gradually. SAP initially planned to move customers to the 22% rate immediately, said O'Dell, who is CIO at Pacific Coast Companies Inc., a building materials maker in Rancho Cordova, Calif.

"We weren't successful in blocking it. We would have liked to," he said. "We were able to get some concessions.

"I'm not going to tell you it's a good deal. From my company's perspective, we don't like to pay more for anything," O'Dell added. Pacific Coast uses the Standard support program.

The new service includes "a 24/7 service-level agreement, continuous quality checks, a support advisory and advanced support for implementing SAP ERP enhancement packages and support packages," SAP said.

— Chris Kanaracus, IDG News Service

ISTOCK

Short Takes

Even though its online services business unit incurred operating losses of $488 million, M[illegible] Corp. said that its fourth-quarter revenue rose 18% to $15.8 billion and that its profits rose more than $1 billion to $4.3 billion.

The European C[illegible]sion levied three new antitrust charges against Intel Corp. The EC said the charges reinforce a complaint filed last year in which the chip maker was accused of abusing its dominant market position.

Advanced Mi[illegible]o D[illegible] Inc. has promoted President Dirk Meyer to CEO. He replaces Hector Ruiz. AMD announced the move after reporting its seventh consecutive quarterly loss.

Correction

The vendor of thin clients being installed by Enterprise Rent-A-Car Co. was incorrectly identified in a story in the June 30/July 7 issue ("Environmental Impact: IT Sees the Light on Green Computing"). The devices are made by Wyse Technology Inc.

BUSINESS INTELLIGENCE

No Entry to SAP Site for Business Objects Users

SAP ACKNOWLEDGED last week that problems with an online support switchover for Business Objects customers had left many of the users unable to access its support portal.

SAP, which bought Business Objects SA in January, shifted the business intelligence vendor's online product-support processes to its own system on July 7. But a substantial number of users – nearly 20%, by SAP's admission – hadn't received credentials for logging onto the support site as of last week.

John Sanzone, a BI and data warehousing specialist at a large IT services provider that he asked not be identified, said he had been trying without success to get a log-in for the support site since the changeover. "This is not the service I was expecting," Sanzone said.

A database administrator who works at a hospital in the U.S. and asked to be identified only as Wayne H. said SAP apparently sent a letter with the log-in information to a co-worker on the business side of his organization. But she no longer works there, he said, adding, "This is just a mess."

Andy Cobbold, group vice president of global customer assurance at SAP, said the company didn't have e-mail records for some customers and tried to send their log-ins via regular mail. "Obviously, we'll be conducting a postmortem to make sure we learn lessons from this," Cobbold said.

– CHRIS KANARACUS, IDG NEWS SERVICE

_INFRASTRUCTURE LOG

_DAY 54: This gap between LOB and IT is getting out of hand. Our business processes are rigid and inflexible. We can't react to changes in the business environment. We've got to find a way to bridge the chasm.

_Gil's gonna jump it. I think he needs a bigger engine.

_DAY 55: I'm closing the gap with a Smart SOA™ approach from IBM. They offer a full range of hardware, software and services to speed alignment of LOB and IT. They've proven themselves in over 6,550 SOA engagements of all sizes. Now we have the agility to respond to change.

_Gil says from now on, he's not jumping metaphors.

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GOVERNMENT IT

State Launches Project to Replace Sinking Data Center

THE STATE of Tennessee is relocating — at least partially — a data center located on an unstable landfill next to a railroad and downstream from a large dam that, according to the U.S. Army Corps of Engineers, is at risk of failing.

Wolf Creek Dam, Jamestown, Ky.
AP IMAGES

The state this month began work on a new $68 million data center 25 miles southeast of Nashville that will replace half of the at-risk 21-year-old, 70,000-square-foot facility.

Officials had initially hoped to simultaneously build two 35,000-square-foot data centers to replace the older facility, located near the Cumberland River in Nashville. However, budget shortfalls forced the state to build one data center at a time, said Tennessee CIO Mark Bengel.

Once the first new data center is completed by the end of the first quarter of 2009, the state will move "the most critical applications" there, Bengel said. The facility will also serve as a fail-over site, he said.

At that point, if budget conditions are favorable, the state hopes to immediately begin work on the second data center. It would be located about 25 to 30 miles from the first new facility.

Bengel said there are foundation cracks in the current data center, which has also started to sink into the underlying landfill.

Nonetheless, Bengel said he expects the facility to hold up until the second new data center is built.

He did acknowledge that the Army Corps of Engineers hasn't given the state a clear indication of the likelihood of a break in the upstream Wolf Creek Dam on the Cumberland River in Jamestown, Ky. "They just don't know or won't say," Bengel said.

Allison Jarrett, a public affairs specialist at the Corps of Engineers, said the U.S. is spending about $314 million to improve the dam. "We really have no concern that the dam is going to fail," she said.

— Patrick Thibodeau

BETWEEN THE LINES *By John Klossner*

In another legal blow to The SCO Group Inc., a federal judge ordered it to pay $2.55 million to Novell Inc. for improperly collecting Unix licensing revenue from Sun Microsystems Inc.

Despite the activation glitches that marred the launch of the iPhone 3G, Apple Inc. said it sold 1 million of the devices in the first three days of sales.

40 YEARS AGO: Robert Noyce and Gordon Moore incorporated Intel Corp., initially as NM Electronics Inc. The duo had obtained start-up funding with a one-page business plan.

Global Dispatches

Barclays Offshores 1,800 U.K. IT Jobs

LONDON – Barclays PLC last week disclosed plans to move some 1,800 of its 2,800 U.K.-based IT jobs to facilities in Singapore, Hungary and India over the next three years.

The London-based financial services firm said the move is part of an effort to "transform to a global organization." The worldwide operations "will allow us to follow the sun and be operational 24/7," it said.

Affected workers will get three months' notice and a £2,000 ($4,000 U.S.) allowance for retraining. Those losing jobs can reapply for positions at the offshore facilities.

The move comes a year after Barclays had announced plans to cut 1,100 jobs, including IT support and payment-processing positions, because of the implementation of automated check-handling.

Leo King,
Computerworld U.K.

Intel Launches Indian Online Mart

BANGALORE, India – Intel Corp. last week launched an online exchange to help small and midsize businesses in India purchase business software and services for use with Intel technology.

The Intel Business Exchange for India, based here, will list products from India-based and multinational vendors, said Narendra Bhandari, director of Intel's Asia-Pacific software and solutions group.

Peter Elmgren, managing director of the Business Exchange operation, said that Intel has set up similar operations in China and North America over the past seven months.

John Ribeiro,
IDG News Service

SHORT TAKES

Jackson Hu resigned last week as chairman and CEO of Hsinchu, Taiwan-based United Microelectronics Corp. Hu had replaced company founder Robert Tsao in 2006. Tsao stepped down after he was charged with illegally investing in China. UMC Chief Financial Officer Stan Hung will take over as chairman, and COO Sun Shih-wei will be CEO.

Dan Nystedt,
IDG News Service

_INFRASTRUCTURE LOG

_DAY 68: Managing all our services is so complex. What assets didn't we identify? Are we monitoring everything? What's out there? We need more control to mitigate risk.

_Gil installed hundreds of security cameras to find and monitor everything. Including, apparently, the mop closet.

_DAY 70: The answer: IBM Service Management. IBM's experts helped us plan strategically for quality service delivery. IBM Tivoli gives us the visibility, control and automation we need to help ensure compliance and manage risks. And the advanced authentication and encryption on our new IBM POWER™ systems help make us more secure than ever.

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Corporate IT Can Learn a Lot From Web 2.0 Coders

DAN PAGE

Companies can cut costs and boost productivity by focusing more on their users.

By Heather Havenstein

ON JULY 14, Yahoo Inc.'s Flickr unit reported that the latest update to the photo-sharing Web site went live two days earlier with five changes made by two of its developers. The July 12 "deployment" was the 42nd new release in a week where 19 developers made 735 changes.

Such constant tweaking — called a "perpetual beta" in the Web 2.0 world — is common for companies like Sunnyvale, Calif.-based Flickr that build applications for a consumer market that's always in flux.

Quick, incremental updates, along with heavy user involvement, are key characteristics of an emerging software development paradigm championed by a new generation of Web 2.0 start-ups.

The new process, which some champions call "application development 2.0," contrasts markedly with the traditional corporate waterfall process that separates projects into several distinct phases, ranging from requirements to maintenance. Nonetheless, application development 2.0 could significantly cut development costs and improve software quality if managers and developers are willing to make some hard changes.

"Sometimes enterprise organizations tend to look at these [Web 2.0-focused] places and say they are not very disciplined," said Jeffrey Hammond, an analyst at Forrester Research Inc. "That is not the case. They have built discipline into the process that allows them to be very reactive — a [good] lesson for IT organizations."

Based on interviews with analysts and executives of Web 2.0 firms, *Computerworld* compiled a list of five ways that corporate IT managers can benefit from Web 2.0 development processes. Here they are:

1 Break the barrier between developers and end users, and involve users in quality assurance processes.

Wesabe Inc., which runs a personal finance Web site, doesn't have a formal internal quality assurance group. Instead, the San Francisco-based company relies on users and founder and CEO Marc Hedlund.

Wesabe's developers work with users to come up with new features, and then Hedlund tests them before rolling them out to Wesabe.com.

Hedlund said that before launching Wesabe two years ago, he studied many of the common development techniques put into place by Web 2.0 companies. He said he concluded that applications are inherently built better when developers are not insulated from the people who use their applications. Direct user complaints or compliments are far better motivators for developers than PowerPoint slides with bar charts representing user desires.

William Gribbons, director of the graduate program in human factors at Bentley College in Waltham, Mass., said that large companies can benefit financially by using Web 2.0 techniques to develop applications for employees.

"Companies often think their [internal] applications are different because they're used by employees [who] are compensated for the pain and suffering they are enduring," he said. That pain and suffering, however, can lead to increases in training costs and employee turnover and cut productivity — all a hit to the corporate bottom line.

Corporate development teams should focus on close interaction with internal users to gather requirements, and to create a controlled, systematic way to observe

Continued on page 14

IBM

_INFRASTRUCTURE LOG

_DAY 41: Our processing needs and energy bills keep growing! We're spending so much just powering and cooling our machines. Gil knows where we can generate more power.

_He moved the data center to the top of a dam.

_DAY 44: I've got it: IBM Services can help us design a data center that runs on fewer, more energy-efficient IBM Systems, driving utilization up and costs down. IBM Systems Director Active Energy Manager™ and IBM Tivoli software can help monitor usage and manage costs. It's all part of their approach to the new enterprise data center.

_Good—I'm not that into dams. I'm more of a fjord guy.

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Continued from page 12
users interacting with prototypes, Gribbons suggested.

2 Keep it simple. Although many consumer-focused Web 2.0 applications may seem simple, that simplicity is usually the result of hard work by developers working hand-in-hand with users.

Stan Schroeder, a blogger at Mashable, a social network that follows Web 2.0 companies, noted in a post that developers have begun to understand that it's better to build a very simple service and then add APIs to provide complex services.

"Features, I've recently come to realize, can be obstacles, problems. The more powerful an application is, the more specialized it is, and thus with increased power, its intended audience shrinks," Schroeder wrote.

Many times, traditional enterprise IT shops will identify a need and develop multiple ways of meeting it when the user would be happy with just one way, Gribbons noted. But without constant interaction with users, developers are often unaware of the yearning for simple user interfaces.

3 Stick to the script. Web 2.0 companies are partial to dynamic scripting languages like Ruby, Python, Perl and PHP, finding them better choices for their projects than Sun's Java or Microsoft's .Net.

Forrester's Hammond noted that once developers become proficient in one of the dynamic languages, they can build new applications quickly — 30% to 40% faster than they could with Java or .Net.

More than half of all North American developers are using scripting languages to some degree, according to a December survey by Evans Data Corp., a Santa Cruz, Calif., research firm.

While more than half of those developers now use scripts less than 20% of the time, both the total number of developers using scripting languages and the amount of time spent will likely increase over the next year, according to the Evans survey.

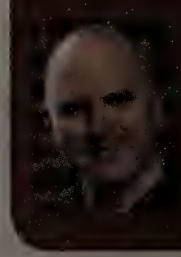
4 Release early and often. Wesabe, like Flickr, updates its site often, usually several times a day. The constant interaction with users provides Wesabe developers with almost immediate notification of bugs, Hedlund noted.

In addition, Wesabe and many other Web 2.0 companies run so-called shadow versions of their sites, which help determine how users respond to specific feature updates.

A report compiled by the shadow site could show, for example, how often users log off the site or whether the amount of financial information uploaded by users has dropped.

Recommended Reading Inc.'s Mixx.com social news site, which allows users to submit and rank news items, is also updated far more often than traditional IT applications — about once every week or two, said CEO Chris McGill.

■ Two years before launching Wesabe Inc., founder and CEO Marc Hedlund studied many of the common development techniques used by top Web 2.0 companies.



In fact, "long term" for Mixx means a product road map that stretches out only six months, said McGill, who founded the McLean, Va., firm in 2007 after stints as general manager of Yahoo News and vice president of strategy at Gannett Co.'s *USA Today* newspaper.

The Mixx.com development team, which meets daily to discuss the previous day's work, uses the Scrum agile development method.

5 Let the users, not the developers, determine new features. Top Internet companies like Amazon.com Inc. and Google Inc. release new features to small subsets of users and then compare their feedback to the experiences of control groups. The companies say the method provides much better validation for new features and products than customer surveys or even discussions between users and product managers.

Mixx.com hopes one day to follow the same process, McGill noted, adding that it has already moved to take advantage of a community formed by its users. Mixx uses the community as a "24/7 focus group" to bounce ideas off its members, he added.

Three Steps To App Dev 2.0

- Use rich Internet applications to improve user experiences.
- Give users the power to create, edit and manipulate site content and artifacts via self-help discussion forums or wikis.
- Directly expose users to data that creates value, such as customer purchase preferences and product inventory levels.

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SHIFTING OPINIONS

Although most large companies are unlikely to flock quickly to Web 2.0 development techniques — and some applications would not be a good fit for this methodology, observers acknowledged — some are starting to realize the merits of these new processes. That's the message of a July 1 survey of more than 1,300 developers that Glastonbury, Conn.-based TopCoder Inc. conducted for *Computerworld*.

In the survey of developers taking part in a recent TopCoder online coding competition, an overwhelmingly majority (70%) of the respondents said that traditional corporate development teams could benefit from Web 2.0 techniques, specifically the incremental feature releases, quick user feedback loops and quality assurance programs that include users.

What's more, 57% of the respondents said that problem-solving and analytical skills will be key requirements for next-generation developers, while 18% cited the need to work with online communities. Meanwhile, 24% said that code generation is the key long-range development skill.

Gribbons said that corporate use of application development 2.0 techniques — especially the focus on the user — could be critical to reducing the number of IT development projects that are scrapped before completion.

As he pointed out, "no other industry would accept a failure rate that we have in our industry." ■

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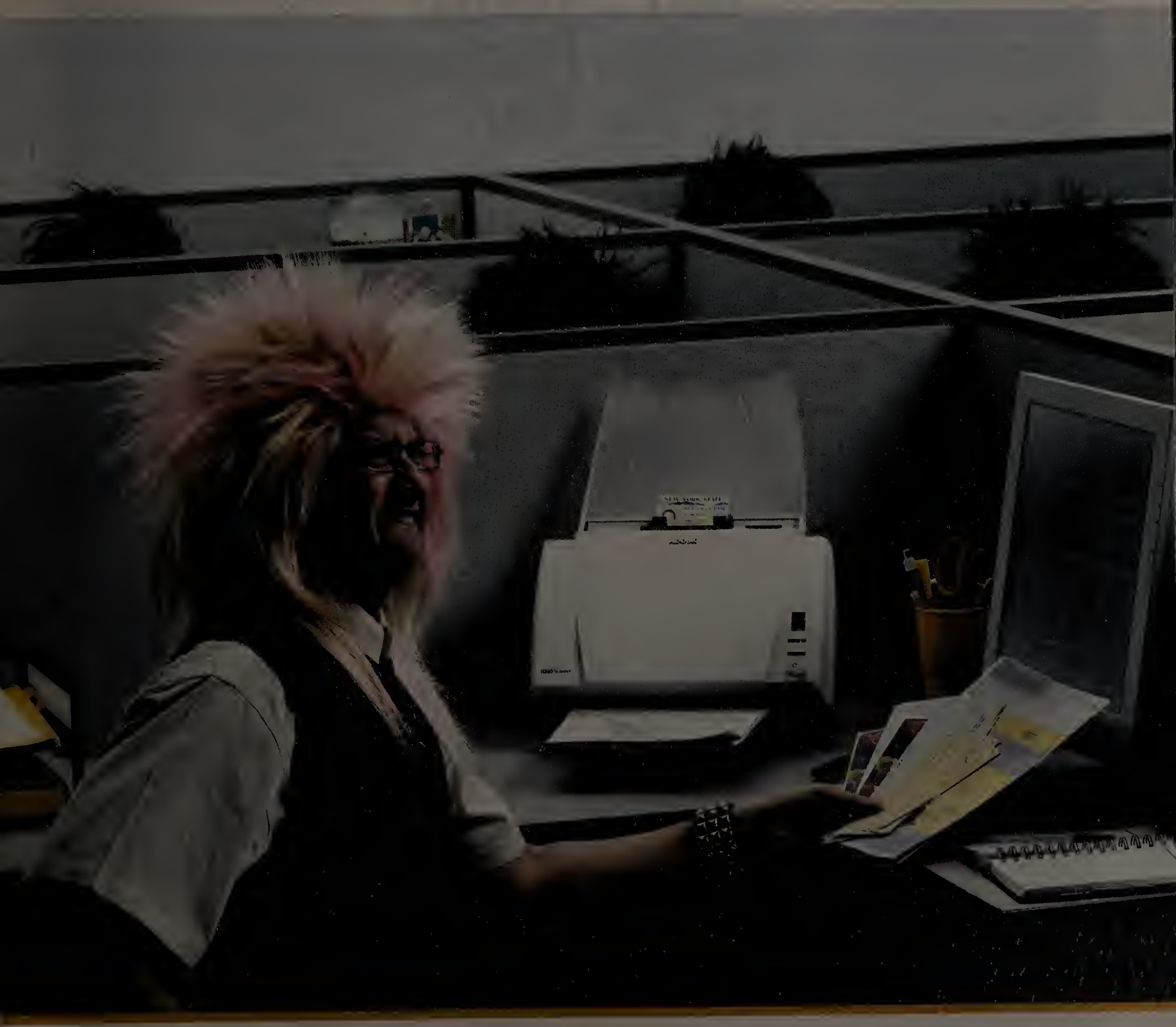

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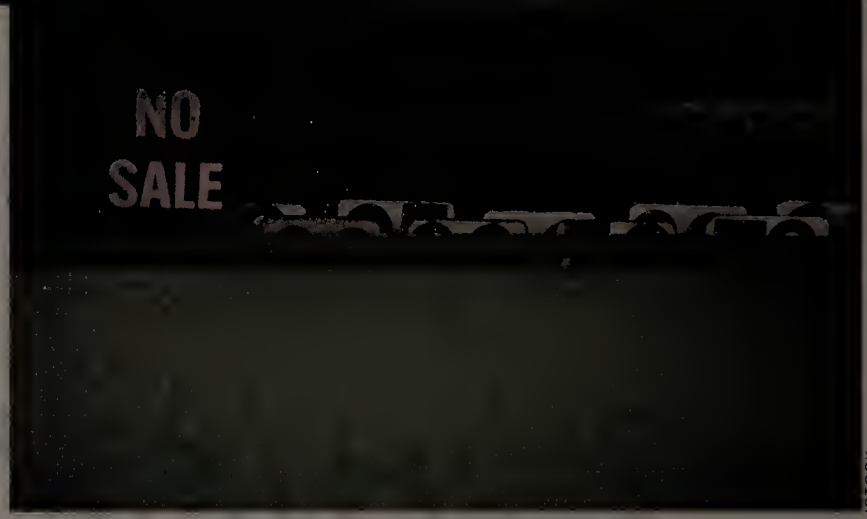

ISTOCK

Vendors to IT: No Economic Stimulus Packages For You

As the economic news gets bleaker, IT execs aren't getting many price breaks from vendors. And in some cases, prices are actually going up.

By Patrick Thibodeau

ON THE SAME day last week that Federal Reserve Chairman Ben Bernanke gave a gloomy assessment of the U.S. economy to members of a House committee, SAP AG announced plans to shift all of its users to a new support plan that will increase their software maintenance fees.

SAP's price increase (see story, page 8) isn't the only one users are facing. Oracle Corp. raised the list prices of some of its key products by 15% or more last month. And last week, Emerson Network Power hiked the price of some of its data-center cooling and power systems by 5%, passing along the higher costs it's paying for raw materials.

Such actions beg the question: Are IT vendors out of touch with reality?

As the economy goes from bad to worse, many IT managers are seeking new terms and price breaks from vendors, and some are delaying planned hardware upgrades and application deployments. But judging from interviews with nearly a dozen IT managers, the economic problems aren't resulting in a buyer's market for IT just yet.

For instance, Phil Chuang, IT director at the home health care division of Sacramento-based Sutter Health, plans to seek price reductions from his technology suppliers as part of his negotiating strategy. However, he said, "I don't see vendors really changing their behavior at this point."

Chuang and other users said that vendors of IT equipment and applications that could easily be replaced with other products are likely to face particularly tough negotiations in the current economic climate.

On the flip side, open-source vendors, software-as-a-service (SaaS) providers and outsourcers could see new opportunities as users move to maintain or improve their IT capabilities while reining in costs.

IT execs also may put some purchases on hold while their companies ride out the economic storm. Chuang, for one, still has a laptop refresh in his budget for next year. But he said the planned upgrade is low on his priority list and may well "slip" to a later time.

Similarly, Tridel Corp. CIO Ted Maulucci decided to postpone the usual three-year replacement cycle on laptops at the Toronto-based condominium builder this year. The end-user performance gains don't justify an upgrade during an economic downturn, Maulucci said.

Matthew Kesner, chief technology officer at law firm Fenwick & West LLP in Mountain View, Calif., said the prices he's seeing from IT vendors "continue to go up, not down." That probably results partly from ongoing consolidation among vendors of legal applications, Kesner added.

"The big companies are getting bigger," giving them more leverage with users, he said.

But like some of his peers, Kesner is considering a range of options. For instance, he's interested in the possibility of using an online service to help offload some of the 250TB of data that he now stores, although he said a compelling offering hasn't surfaced.

Some vendors are responding to the economic downturn, according to IT managers such as Greg Morrison, CIO at media conglomerate Cox Enterprises Inc. in Atlanta.

"I'm not sure it's a buyer's market yet," Morrison said. But he added that some of the vendors he deals with "are acknowledging the difficult economic environment by proactively reaching out to customers with cost-reduction suggestions." Most of that activity is focused on maintenance costs, as opposed to new product sales, Morrison said.

Kevin Bott, CIO at Ryder System Inc., a Miami-based transportation and logistics services provider, said that IT pricing is "definitely more in favor of the buyers" now than it had been over the past couple years.

"We're seeing bigger discounts than we normally see," Bott said, pointing to substantial savings on telecommunications costs as an example. But Bott, an SAP user, added that he's still paying "pretty hefty" software maintenance fees.

Guido Sacchi, CIO and senior vice president of corporate strategies at CompuCredit Corp. in Atlanta, is another user who said he has seen vendors are showing a greater willingness to work with him on pricing.

But Sacchi is also considering new technologies, including open-source and Google applications. And he has started piloting desktop virtualization software that he hopes will arm him with better data about application usage at CompuCredit. If a particular app isn't getting the use it should, Sacchi plans to ask the vendor to lower its license fee.

Even in a tough economy, he said, "if you go back to the negotiating table, you better have data." ■

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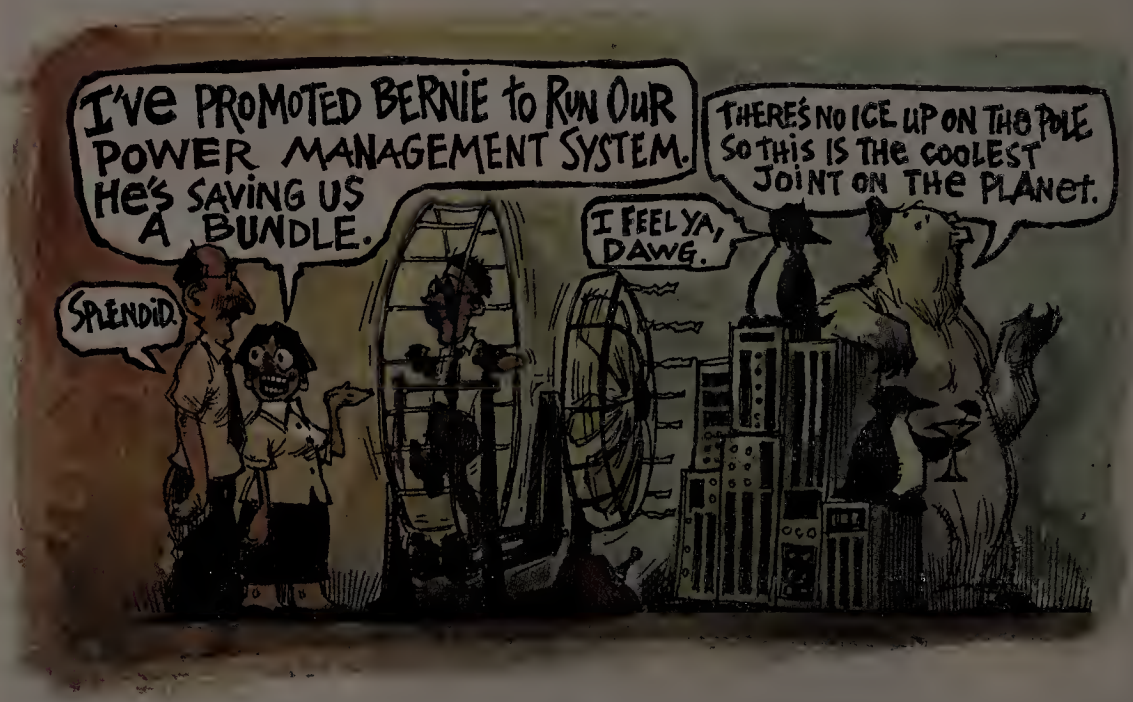

MATTHEW FAULKNER

How Green Is Your UPS?

SERVERS, SWITCHES and routers certainly suck up a lot of electricity. But according to power engineers at Cleveland-based Eaton Corp., all that hardware actually accounts for less than a third of your data center's electricity demand. Your HVAC and power management systems gobble up the rest.

So, if you want to go green, more-efficient computer and network systems aren't enough.

One place to start is with your uninterruptible power supply, says Pedro Robredo, product line manager at Eaton's power quality division. He says the company's transformerless UPS 9395 825 kVA is more efficient because transformers squander kilowatts and take up a lot of real estate.

Fred Miller, another Eaton product line manager, says combining the UPS 9395 825 and its power distribution unit, which handles power loads for each rack of servers, can get you to 98.5% power efficiency.

Pricing is implementation-specific.

Eaton claims its transformerless UPS saves power and space.

An Engine for Ruby

The hottest thing in software development? It's not Web services. It's not .Net. It's Ruby on Rails.

Ruby is the open-source programming language, Rails is the Ruby-built open-source development framework. Combined, they make the most efficient development environment available, advocates assert. And it's hot enough for a Web hosting company to be dedicated to running applications built with it.

Engine Yard Inc. has a staff of 75 to run two data centers in North America hosting Ruby on Rails apps; another is being built in London. According to Lance Walley, CEO of the two-year-old start-up, developers are flocking to Ruby on Rails because it would take them more time to write apps in Java or .Net.

But why do Ruby on Rails applications deserve a special hosting operation? Alas, Ruby has some deficiencies, Walley says. For example, it doesn't use computing resources as efficiently as other languages, so scaling apps can be a problem. But, he says, his data center crews are experts at scaling Ruby apps. Engine Yard specialists also know how to test the stability of Ruby on Rails apps with existing open-source tools. Their knowledge of the development environment can be critical, Walley says, because Ruby on Rails is poorly documented in many areas, such as interacting with apps written in Java or .Net.

Ruby on Rails deserves a dedicated hosting service, Walley contends.

A "slice" (CPU, memory, storage and such) of San Francisco-based Engine Yard's data center starts at $399 per month.

Reduce App/OS Size

Lynn LeBlanc wants you to think small.

The CEO of FastScale Technology Inc. in Santa Clara, Calif., says there's no reason to load an entire operating system when an application will use just a fraction of its resources. With the FastScale Composer Suite, you create dynamic application bundles, or DABs, that are up to 95% smaller than a full app/OS combination but give you all the functions you need.

FastScale's repository strips out the parts of the operating system your application doesn't need and provisions your servers accordingly. LeBlanc claims the process takes only a few minutes.

FastScale Version 2.1 supports Windows Server 2003 as well as Linux, and it can provision only those parts you need for a packaged app, such as WebLogic. If a workload calls for a function that has been removed, FastScale is smart enough to grab it from the repository so it can execute. Pricing starts at $30,000. ■

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BSM: Converging IT and Business

Business Service Management sets a place for IT at the business round table

FOR DECADES, CIOs and senior IT managers have struggled to align IT with business strategies. Today, the pressure to do so is greater than ever. Global competition, economic uncertainty, and increasing demand are intensifying the requirement that IT operate as a business enabler.

Searching for a strategy to unite IT and the business, and thereby driving real growth while improving service, a growing number of CIOs are turning to Business Service Management (BSM). Central to this strategy are the integration of IT management disciplines, process automation, and the use of business values to measureIT success. This comprehensive approach is delivering the level of services the dynamic business world requires.

To more deeply probe the emerging BSM environment, including its value proposition and core enabling projects, *Computerworld* teamed with CA and IDG Research to conduct a unique survey of BSM adoption in large organizations.

The survey results, which are available in a white paper and as a slide presentation (see download offer in box below), paint a clear picture of BSM winning the hearts and minds of CIOs seeking to match the highest quality services with business needs. More important, BSM offers CIOs a clear path away from managing devices and applications as the main focus and toward orchestrating the management of all infrastructure components to support business services.

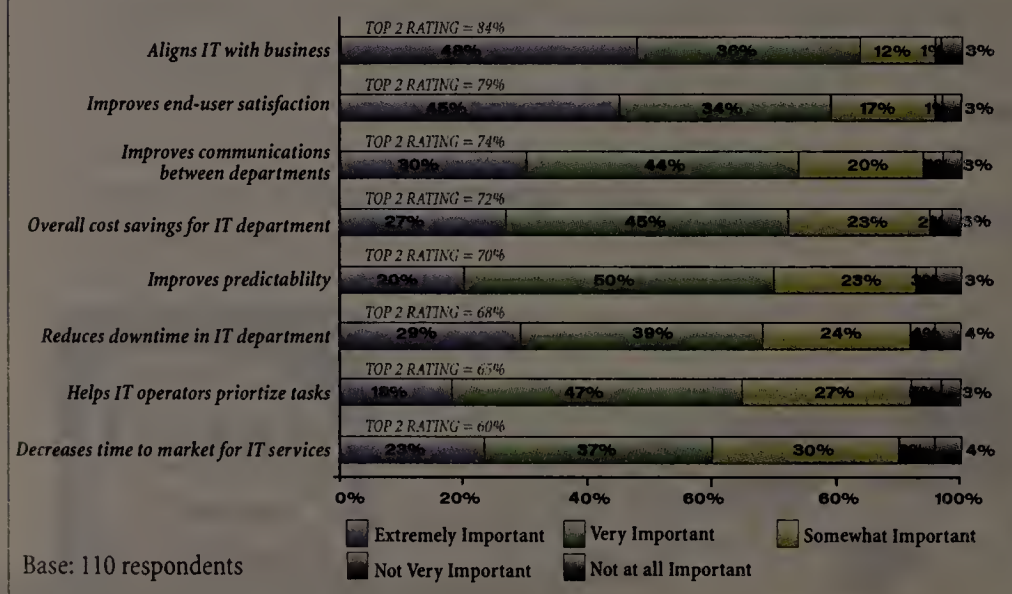
Specifically, two-thirds of the *Computerworld* survey of 110 senior IT managers have either already adopted BSM or are planning to do so within the next 12 months. And while "better alignment of IT and the business" was cited most often as the key driver of BSM adoption, half of the respondents cited the use of commonly accepted best practice standards within BSM as a key driver. These drivers include ITIL, COBIT and Six Sigma.

Some of the more compelling findings of this research are presented in the chart below. Here we see the unique value proposition of BSM as it relates to specific business benefits first and foremost–benefits such as greater predictability, elevated end-user satisfaction, faster time to market, and of course optimal IT-business alignment.

Perhaps the greatest BSM benefit measurement lies in the often-elusive competitive advantage that many early adopters of BSM have realized. This advantage is gained not only from greater business agility and performance, but also from an IT environment that is truly a means to an end. And that is the truest alignment of IT and the business.

Importance of BSM Benefits

Please rate the following benefits of BSM on their importance to your organization.



Base: 110 respondents

Source: *Computerworld*/ IDG Research

Download the entire white paper and other BSM resources now!

Want to download and read the entire White Paper based on the *Computerworld* BSM Research Study as well as interviews with users and analysts? Go to www.computerworld.com/solutions/ca for a free copy. You can also download a slide deck containing slides of all the key research findings and you can click on a highly informative, brief video overview of the core value proposition of BSM. In addition to these downloads, you'll can view both a short and long version of an interview with two of the most prominent and knowledgeable BSM authorities – all at no charge. Just enter this address in your navigation bar: www.computerworld.com/solutions/ca.

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Business has its ups and downs,
but customers should always have

EFITWSWTDEKIT

(**E**verything **F**rom **IT** **W**orking **S**o **W**ell **T**hey **D**on't **E**ven **K**now **I**t's **T**here)

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■ THE GRILL

Robert Madge

The **Token Ring pioneer** talks about his **high-flying days, his company's collapse** and how **strengths** can sometimes **become weaknesses.**

Does the name Robert Madge mean anything to you? It probably rings a bell, if a distant one. Madge was the founder of Madge Networks Inc., which in the late '90s was the market leader in Token Ring networking technology. The once high-flying company has since met the same fate as that of Token Ring itself: near oblivion.

Since leaving his namesake company in 2001, Madge has won acclaim in the field of RFID and tracking technology.

Dossier

Name: Robert Madge

Title: President

Company: IDTrack

Location: Barcelona, Spain

Favorite book: *Tess of the d'Urbevilles*

Role model: Bill Hewlett

Ask him to do anything but . . . "Deceive people."

Favorite nonwork pastime: Mountain biking

Favorite vacation spot: St. Lucia

You left Madge Networks in 2001. Why?
By 2001, the company had not succeeded in the attempts I had made to diversify. We had this very strong focus on Token Ring local networking, which was a very successful strategy so long as people bought Token Ring.

We made some attempts to diversify. One was where we purchased a company, Lannet, that put us more into Ethernet and other local-area networking. Also, we invested heavily in [Asynchronous Transfer Mode] technology. Those were completely different directions. And neither effort succeeded, for different reasons. It wasn't the right strategy for us to broaden our range when we didn't have the same scale as many other players in the arena.

Also, the trend was moving away [from the question of] which was the underlying protocol to a focus on just Internet Protocol. So customers were choosing solutions based on it just being an IP strategy.

The issue of the underlying strategy of Token Ring or Ethernet or anything else was starting to become much less relevant.

And at that point, Cisco was very clearly becoming the dominant IP supplier. We didn't have a router range, so we weren't a player in that game. And it was too late to diversify into a technology that was already established.

Continued on page 24

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"The reason why I didn't see the writing on the wall when the best thing to do was to sell the company is probably the same reason why I built the company in the first place.

Continued from page 22

That explains the problems you were facing, but not why you left. Well, I oversaw the decline of the company, and I guess I was out of ideas. Token Ring was still playing pretty strong, but by the late '90s, the writing was on the wall and had been on the wall for a while. And then sales started to decline.

Two years later, in 2003, the company filed for bankruptcy protection. Any insights on that? I moved out completely, so I don't have any association with the management of the company. I had been running that company for 15 years, and I had taken it up, but unfortunately I had taken it down as well.

I needed a clean break.

The company was restructured as Madge Inc., and in 2006 was acquired by Network Technology in the U.K. and merged into that company's Ringdale arm under the Madge name. Were you concerned about their keeping that name? There are good and bad issues about naming a company after yourself. It made me that much more committed. It had my name on it, so of course I would be judged by the company. And that's what happened, even when I wasn't with the company. So obviously, if I was going to be completely detached, I'd rather it didn't carry my name. But that was not my option. The name was the property of the company.

In hindsight, was there anything you could have done differently that would have saved the company from the downslide? With hindsight, I could always speculate, but I couldn't prove anything. But I'm sure I should have found ways for the company to do better than it did.

The fundamental issue was that we had success by focusing on one area of technology, and as that area of technology turned out to have a limited lifetime with no natural progression path, it was up to me and the other members of the management team to find a future path.

We clearly spent money in areas that didn't produce a return.

If you had stuck with a Token Ring-only strategy, do you think that would have prolonged the life of the company? No. We could, perhaps, have just dispersed cash to shareholders, but I don't think as a survival strategy just sticking with Token Ring was a viable option.

What lesson did you learn from the experience with Madge Networks that might be applicable to IT professionals? I try to be objective. Although I don't necessarily believe it emotionally, if you step back and look at it, a logical move for a company whose technology is going into decline but has a customer base, and hasn't been able to find a way to evolve the company, would be to merge with or be sold to another company. In hindsight, it would have been the logical course.

Did you make any attempt to do that? No. To me, the company was very personal. I put my name on it, and I came from a culture where companies were for life. So I'm sure that emotionally, I wasn't in a good position to consider objectively whether it should be sold or not.

People's weaknesses and strengths are normally the same things. It all depends on the context whether they turn out to be strengths or weaknesses. The reason why I didn't see the writing on the wall when the best thing to do was to sell the company is probably the same reason why I built the company in the first place.

When you left in 2001, what did you do? I went and dug the garden. I didn't really start any new activity for a couple of years.

How did you make out financially? Net loss from Madge Networks. If you look at it in purely cash terms, I put quite a lot more money into Madge Networks than I ever got out. But that's partly because at some point in time, I took some money out and invested it elsewhere and made more money. And the more money I made, I basically plowed it all back into Madge, at a time when Madge was going bad.

Were you financially secure when you left in 2001? Certainly not in the way I might have hoped.

— Interview by **Don Tennant**

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■ OPINION

Scot Finnie

Microsoft's Turning Point

MICROSOFT IS probably standing at its most important crossroads ever, just when Bill Gates is waving goodbye.

Well, actually, Microsoft has been missing Gates for a long time.

Something happened after the 2004 antitrust ruling, both to the company and to its longtime visionary — call it a loss of focus. You have to wonder now whether Microsoft can get back to its old confident ways without its founder's guidance.

It's not that Gates was a brilliant programmer or even an uncanny tech prognosticator. His genius combined adherence to Microsoft's "own the platform" strategy, a fine appreciation of business and technical opportunities, impressive customer focus, and an unflinching willingness to own up to strategic mistakes and swiftly rectify them. For the most part, Gates' instincts and talents, along with excellent timing, have served Microsoft very well.

But somewhere along the way, something changed. After the antitrust ruling, Microsoft took a new tack, focusing mostly on larger IT customers at the expense of smaller companies and corporate end users. The company reeled through the Windows Vista development cycle and dropped the ball on its Internet search effort, MSN. It became something it had never been: a company focused on conserving its base and making short-term profits, with no attention paid to charting a long-term strategy.

It's become stylish to bash Microsoft. But 15 years ago, it was one of the best companies in tech. Write its success off to anticompetitive tactics if you like, but I was there. What was equally true was that many of Microsoft's big competitors — such as IBM, Lotus and WordPerfect — missed the boat.

■ Yahoo is becoming Moby Dick to Microsoft's Ahab.

Microsoft stayed focused on what customers wanted, and it continued to update its products with that in mind. Microsoft made products easier and more fun to use (or what passed for fun in those days).

Today, the company has allowed that winning formula to fall away. The search business passed Microsoft by, and Gates missed his cue to rectify the error.

Instead, Microsoft's decisions have been shortsighted: It has turned software antipiracy measures into a strategic initiative; it has delivered Web-based "Live" products that require a program installed on the client; and its CEO, Steve Ballmer, has asserted that Linux infringed on Microsoft's intellectual property. These are not the hallmarks of a company leading the technology industry with strategic vision.

So now Microsoft wants to buy Yahoo, badly?

Where was that kind of conviction in 2005? Deep-pocketed Google has already won that war. (It's not by chance that it did so by iteratively refining its products to make them easier and more fun to use.) In the words of Ken Mingis, *Computerworld*'s managing news editor, Yahoo is becoming Moby Dick to Microsoft's Ahab. While Ballmer and team are obsessed by the fish that got away — Internet search and ad sales — Google is slowly plotting its way into Microsoft's enterprise business.

Microsoft needs to get its mojo back — to regain its customer focus. But it's not alone in failing to do so. The entire IT industry could use inspiration. Tweaking your software license to increase profits is not innovation. And leadership isn't putting a stake in the ground with a promise of delivering a key new enterprise technology to box out smaller competitors. That's the very essence of shriveled, short-term thinking.

IT customers expect an industry leader to do more than rest on its laurels. It's time for Microsoft and other big IT vendors to ante up some big-time vision and R&D that delivers significant innovation. Anything less is just minding the store until the next leader arrives. ■

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HOW TO GET MORE OUT OF ITIL WITH VERSION

Advice from users who have been around the track.

IT HAS BEEN JUST over a year since the introduction of Version 3 of the IT Infrastructure Library (ITIL). The update to ITIL, a framework for best practices in IT service delivery, was intended to sharpen its focus and attract a new group of followers.

So did it? Well, yes and no. Early adopters have mostly high praise for ITIL Version 3. It is broader, deeper and better organized, and users say its "life cycle" approach to IT service delivery is a major improvement over Version 2's more narrow focus on day-to-day operations and its disjointed collection of point prescriptions.

Still, not all users of Version 2 have rushed to adopt Version 3, which its authors call a "refresh."

Many say they are happy with the older version of ITIL because they have patched its shortcomings with other methodologies and homegrown remedies. And, they say, a comprehensive adoption of any version of ITIL is a huge task, often requiring a major cultural change inside IT.

ITIL was created in the late 1980s by an agency of the British government, now called the Office of Government Commerce (OGC), as a way to describe a systematic approach to the provisioning and management of IT services. ITIL became popular in Europe during the 1990s but didn't catch on in the U.S. until well after 2000.

ITIL was, and remains, literally a library of books, though the OGC also offers a raft of ITIL-related materials on its Web site.

Published in 2001, Version 2 focuses on two pillars of IT infrastructure and operations: service support and service delivery. It prescribes best practices for incident, change, capacity and configuration management. Using those best practices, companies found that they were able to improve and standardize their data center operations.

But important topics such as security, financial management, the relationship between IT services and business value, and links between ITIL and other process disciplines got only lip service, if that, in ITIL v2.

And Version 2 tended to say what to do without specifying exactly how to do it. Many companies liked that approach, saying it gave them freedom to adapt ITIL to their unique situations, but others complained that it left too much to the imagination.

In 2000, Microsoft Corp. put some of the "how to" into the Microsoft Operations Framework (MOF), its extension and enhancement of ITIL tailored to Microsoft IT environments.

VERSION 3 TO THE RESCUE

Version 3 sweeps aside many of those earlier criticisms. It is more specific as to how its advice might be carried out, turning v2's theories into specifics by including business-case examples and templates for capturing information. It also provides performance metrics and workflow examples.

"What v3 has done is integrate ITIL's different components much better," explains Robert Humphrey, global process governance director at Computer Sciences Corp. "With the introduction of the life-cycle model, which covers strategy through design through to continuous improvement, ITIL provides a much more natural flow," he says. "Now it gives equal importance to all the elements."

ITIL v3 has expanded the concept of IT service delivery from day-to-day operations to five life-cycle phases (each with its own guidebook): strategy, design, transition (which covers implementation and change), operations and continual improvement.

And at the strategy end of things, v3 specifically invites the business manager into the process by asking IT to base the design, maintenance and evolution of IT services on the business objectives of the organization. ROI, business metrics and business benefits are covered in much greater detail.

Evelyn Hubbert, an analyst at Forrester Research Inc., says v3 will accelerate the already rapid adoption of ITIL. She says that ITIL is here to stay in part because "there is nothing else."

So is it time to get on the ITIL v3 bandwagon? Experienced users offer the following advice:

1 Don't abandon your Version 2 efforts. Companies that have patched and supplemented ITIL v2 over the years may feel little

urgency to use v3. Phyllis Drucker, director of consolidated services at AutoNation Inc., says the car retailer filled some gaps in v2 with Microsoft's MOF and some homegrown processes. The result is a "very robust" and integrated set of processes for change, capacity and service design management, she says.

Will she scrap v2 and MOF? "No," Drucker says. "We'll lay v3 over our processes and see if there are any gaps."

Progress Energy Inc. has been working with ITIL v2 for six years. "But there's still a lot we haven't implemented," says Sheri Cassidy, manager of process engineering services.

According to Cassidy, whose unofficial title is ITIL program manager, "To someone just getting into v3, I'd say don't view it as a replacement for v2; view it as a wrapper or a supplement."

She'll continue with v2 and some extracurricular efforts that were under way before v3's arrival but are now included in the refresh, such as a more prescriptive approach to knowledge management, service catalog management, transition management, continuous improvement and templates for things such as service-level agreements.

Alan Claypool, manager of business applications for the city of Tampa, Fla., has been getting into ITIL v2 for the past 18 months. He's starting with mostly old legacy applications running on old legacy operational procedures.

"We have a framework for operations, and in many ways, it's successful," he says. "But it's not a structured framework that can guarantee the quality of outcome each time and [allow us to] do continuous improvements."

Claypool plans to get further into v2 before going headlong into v3, but he and his staff have already begun working their way through the v3 service strategy book. He explains, "We started into design and realized we didn't have our strategy on solid ground, so we stepped back into strategy. What's so nice about v3 is that it really takes you back to the basics of business, and then you design your service to meet those."

2 Do get started on v3. It's worth it. Users say that the most important advance in v3 is its firm linkage of IT services to the business side of the organization.

Hewlett-Packard Co. uses ITIL for its internal operations and the services it provides clients. David Cannon, IT service management practice principal at HP and co-author of the *Service Operation* book in ITIL v3, says that to the extent v2 talked at all about return on investment, it was always in terms of cost savings, and that a focus on the cost of an IT service says nothing about the value of that service to the business. "But v3 focuses instead on what the service specifically is trying to achieve," he says.

Cannon says v3 helps match IT service costs not with "outputs," such as the number of invoices produced, but with "outcomes" — the value of improved cash flow, for instance. "V3 gives you a lot of guidelines as to how to break down your services, how to map them to outcomes and how to cost the services," he says.

Dale Ott, director of service management for Sarasota County Government and Schools in Florida, says the best thing about the new ITIL is its expansion from service operations to include the phases of service design and rollout, as well as the linkages of those to the business. He said v3 has already provided a new framework for helping his department review some applications recently put in place, like an intranet for the county.

"We can look at these and say, 'I don't think I really asked all the right questions before I launched this thing.' We have several things, like Vista and [Microsoft] Office '07, on the horizon, and how to do those well is what v3 offers us," Ott says.

3 Look at the tools. As ITIL has evolved, a variety of IT vendors have developed tools that support its premises. Tampa's Claypool says his early work with ITIL v2 was slowed by a lack of automated software to support vital elements such as a configuration management database. "Now," he says, "you can actually go out and buy a product that matches up with the ITIL structure. That helps tremendously."

Cassidy hails the better integration of topics in v3 and says that's aided by a similar advance in support tools.

What are the ITIL v3 books, and what do they cost?

These are the books, in order of use:
The official introduction to ITIL: *Service Life Cycle* ($60)
Service Strategy ($170)
Service Design ($170)
Service Transition ($170)
Service Operation ($170)
Continual Service Improvement ($170)
(Prices assume $2 per British pound.)
The books are available as paperbacks or PDFs for the same price. Online subscriptions to ITIL materials are available as well.

Where can I get them?

They are available from the U.K. Office of Government Commerce.

Is there a user group?

Yes, there is. The IT Service Management Forum International (*http://itsmfi.org*) is a not-for-profit organization that focuses on the development and promotion of ITIL and IT service management best practices, standards and qualifications. The organization was formed in the U.K. in 1991 and now has chapters in 37 countries. Not limited to ITIL, it embraces other standards and disciplines as well, such as ISO 20000.

Where can I get ITIL training and support?

A number of firms offer these services. A leader is Pink Elephant Inc., which provides training, consulting, publications and conferences in ITIL and IT service management.

– GARY ANTHES

She says Progress Energy in August will begin using Service-now.com, a Web-based utility that supports ITIL v3 practices. "It has much more integration between different [ITIL] processes," Cassidy says. "You could be in problem management but want to update a change ticket, and it's very seamless."

In fact, Cassidy challenges the mantra that companies going into ITIL should get their processes down pat before looking for tools that fit them. "We got into ITIL, and by our third year, we realized that our tools were not allowing us to do some of the things we wanted to do," she says. "In hindsight, we could have made much faster progress had we had better tools."

4 Prepare for culture shock. "Our No. 1 challenge is changing our culture," says the city of Tampa's Claypool. The difficulty, he says, lies in changing an IT mind-set that believes current practices are good enough when they could be much better.

In nearby Sarasota, Fla., ITIL has been in place eight years — long before it gained popularity elsewhere in the U.S. "Gartner didn't even have it on the hype-cycle chart in 2000," says Bob Hanson, CIO for Sarasota County. Now the county has mastered the basics of ITIL v2, but "it hasn't been easy," Hanson says. "It's not the process itself; it's the human side. The traditional model is that the IT person doesn't mind playing the hero role" — that is, swooping in to save the day when processes run amok. "And ITIL usurps the hero role by putting structure in place."

Hanson's advice: "You have to tell your people what's in it for them. Getting them out of hero mode does simplify their life in the long run."

Tampa is just getting started on ITIL but is not reaching out to pricey consultants. Says Claypool, "We are working with Sarasota County. We are looking at their processes and saying, 'County and city are pretty similar; let's just photocopy their processes and see if they are different from our own and should be tailored.' "

5 Don't expect to find everything in v3 – or like everything you find. Cassidy acknowledges that v3 doesn't do everything. For example, she says she failed to find information about how to set up an IT architecture review board. Cassidy also considers v3 to be weak in its treatment of project management. "It's mentioned in several of the v3 books, but the integration between project management and the ITIL processes is still kind of squishy," she says.

While many people praise v3's broader scope, at least one user is not impressed with the book on service strategy, a topic new to v3. "It's my pet hate," says CSC's Humphrey. "There isn't a lot of process in there. It lacks the practicality you get in the more mature areas."

Humphrey says v3 is weak in its treatment of business continuity as well. "Unless you have sorted out business continuity, IT service continuity has no anchor," he says.

He adds that it also falls short on governance, but a coming supplement will better address linkages between ITIL and things like the audit-oriented Cobit (Control Objectives for Information and Related Technology).

HP's Cannon says current work to enhance ITIL v3 — perhaps for a Version 4 — is focused on expanding the framework's scope beyond data center operations to other areas of technology, such as telecommunications and mobile devices. That will become increasingly important as computing continues its long trend toward decentralization, he says.

For example, a future version of ITIL could help an insurance company whose IT services include capturing and processing claims data and photographs from field agents via handhelds.

Cannon says the authors of v3 decided not to address specific technologies, such as iPods, and adds that new, rapidly evolving processing approaches, such as service-oriented architectures, were also deliberately omitted. But that will change. V3 is intended to have a shelf life of eight to 10 years, but it will be accompanied over time by topic-specific "complementary guides," he says.

Sarasota County's Ott speculates that now that ITIL has been broadened to embrace business concepts more rigorously, it may be applicable even outside of IT, to any situation where a team of people is providing a service to customers. It could be applied in a call center, for example, and not just to those parts of the center that are strictly IT-based. "We've all talked about the loss of service in the U.S.," Ott says. "I think this is a way to structurally put it back in place." ■

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Six Stupid Budget Tricks

Dumb but common monetary mistakes and how to avoid them. By Mary K. Pratt

GIVEN the murky economic outlook, budgetary efficiency is an increasingly important part of every IT leader's job. In fact, according to "The State of Enterprise IT Budgets: 2008," a March report from Gartner Inc., 75% of enterprises say improving the efficiency of IT is a critical or high priority.

Think you have the budget covered? So did many others, who nonetheless found themselves explaining missteps that cost hundreds of thousands — even millions — of dollars.

Here are some of the things they learned *not* to do:

1 ALWAYS SAY YES. Acceding to constant demands can send the budget spiraling out of control, says Mike Gorsage, a partner and regional technology practice leader at Tatum LLC, an Atlanta-based executive services and consulting firm.

Gorsage cites the case of a hospital where the CIO worked under a directive to fulfill all requests. "The senior executives told IT if someone needs something, just get it done," he says.

As a result, planned projects accounted for about 10% of the $100 million budget, while unplanned work sucked down a staggering 30%. And just over 60% went to maintenance. Best-practices models indicate that 70% should be spent on maintenance, 25% on planned projects and only 5% on unanticipated demands, Gorsage says.

The tipping point came when IT suffered a costly failure on a big project — a failure that stemmed from all those helter-skelter projects, Gorsage says.

"Finally, the CIO and senior management figured they had to put in strong governance, but it took six or seven months of pain to get that done," Gorsage says. The new rigorous approval and planning process brought the hospital's IT spending closer to that 75/25/5 split.

2 PLAN TO STOP SPENDING ONCE PROJECTS GO LIVE. Underestimating the work needed after a project goes live is the No. 1 problem with IT budgets, says Ken Gabriel, a partner and global lead for the ERP advisory unit at KPMG International, a global network of professional services firms.

It can leave companies with budget overruns of up to 20%, he says — hardly pocket change when proj-

ects cost millions of dollars.

Gabriel worked with one utility company that realized just two weeks before the completion of its new $200 million SAP implementation that it hadn't budgeted for postdelivery needs such as working out bugs and training staffers.

"They had planned to get rid of consultants that day [when it went live], and they realized that it wasn't going to be possible," Gabriel says.

IT leaders had to ask the board for $2 million to bring back about 15 consultants and cover the costs of the 20 internal IT folks needed for that postproject work.

3 PLAN AND SPEND LOCALLY. Local control guarantees that local needs are met, but it adds significant costs to the bottom line. Just ask Randy Headrick, director of communications and information and CIO for the Air National Guard (ANG) at Andrews Air Force Base in Maryland.

Headrick says the ANG didn't have a central budget or procurement process for its IT network, so buying decisions were left up to individuals at each of its 88 bases and 250 smaller units.

"We were heading toward a network that wasn't congruent," Headrick says.

It was also becoming increasingly costly.

Since he centralized budgeting and procurement in 2007, Headrick has been getting better volume prices He also has a more secure infrastructure that's easier and cheaper to maintain because components are standardized. The ANG is spending about 30% less for the same capacity than it did under the distributed process.

"We have a stronger, more secure, more robust, more current network, and it's not costing us as much money," Headrick says.

4 DON'T PLAN FOR BUSINESS INTELLIGENCE OR REPORTING. "People underbudget BI and reporting needs. They focus on the processes, and they think they can get back to the reporting," says John Larkin, a former CIO who's now a partner at TPP Global Services LLC, a consultancy in Westwood, Mass.

He once worked with a company undergoing a $3 million ERP implementation that also called for operational control-type reporting and dashboards for operational monitoring.

Project leaders assumed that the bulk of that work could be done by internal resources, but they failed to consider that they were tied up on implementing the new system. As a result, the company had to spend $600,000 on consultants to handle the BI and reporting requirements, Larkin says.

"It's hard to get a major project like ERP justified, so there's a bias toward assuming that the internal resources can do more than they can," he warns.

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5 BANK ON BIG SAVINGS FROM OVERSEAS OUTSOURCING. Many in IT have yet to learn that there's a limit to the savings offshore outsourcing can really deliver, so they set unrealistic expectations, relying on inflated figures or best-case scenarios that are too good to be true.

Larkin says he worked with one midsize company that had based its IT budget on expectations of a whopping 60% savings from sending application and maintenance work to India.

When the actual savings turned out to be 20% to 30%, the IT execs were left scrambling to squeeze money from other places to cover budget overruns.

"Clearly, getting an experienced adviser, getting benchmarks and talking to others could help get more accurate numbers," Larkin says.

6 DON'T CONSULT; ASSUME. Even if your budget smarts are top-notch, other company leaders can cause you trouble.

When a handful of executives devised a plan to expand Denver-based Frontier Airlines Inc. by adding a new regional airline, the group decided to keep its plans quiet, says Bob Rapp, who was the company's vice president and CIO in 2006.

So the group didn't consult with Rapp, who reported to the chief financial officer, until after the board had approved the project and its financing. That's when Rapp saw that the technology assumptions were way off.

The plan didn't include an industry-specific system operations control center, a Federal Aviation Administration requirement for the new division. The cost: About $1 million to build the facility and then another $1 million per year to operate it, according to Rapp.

Thereafter, he began reporting directly to the CEO to help prevent similar oversights. ■

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Making a call with the Handphone.

The Packet unfolds into a cross-shaped smart phone.

This prototype uses force sensors to recognize motions.

Motion powers the Atlas Kinetic.

One side of the P-Per is a camera, the other has a phone/messaging interface.

Meet Tomorrow's Mobile Phones

Old Ma Bell would hardly recognize these futuristic upstarts. **By Brian Nadel**

THE cookie-cutter approach to designing mobile phones could disappear in the next few years as designers get more daring and more personal.

"All phones today do the basics well," says Shiv Bakhshi, an analyst at research firm IDC. "But that won't be enough in the future."

We asked a dozen designers and industry leaders to predict how mobile phones will change and to guess when the technology behind the new concepts will be available.

Here are some concept phones, which, like concept cars, are meant to demonstrate new ideas, not serve as prototypes of actual soon-to-be-released devices.

Nokia Corp.'s **Morph** is made of flexible materials that mimic the suppleness of spider's silk. It is designed to, well, morph between what looks like a traditional mobile phone and a bracelet. "Using nanotechnology, the phone can change its personality to become whatever is most suitable for the task at hand," says Tapani Ryhanen, head of strategic research at the Nokia

The Morph in bracelet form.

Research Center in Ruoholahti, Finland.

The phone's electronics are expected to be so small that they'll be invisible to the naked eye. This will let designers make the phone transparent, Ryhanen says.

The Morph could also help you live more healthfully, says Nokia. An array of microscopic sensors could measure environmental hazards, such as carbon dioxide levels, or sense a diabetic's blood-sugar balance.

■ **TECHNOLOGY TIMELINE:**
Seven to 15 years

Created by Massimo Marrazzo of Turin, Italy-based design firm Biodomotica, the **Handphone** has a microphone shaped like a ring that slips on the end of your pinky. The speaker is on another ring that slips on your thumb, and a circular phone controller and radio sit on the back of your hand, held on by elastic string.

Anyone who has ever motioned toward his mouth and ear with outstretched pinky and thumb to imitate making a call will know how to use Handphone. "The gesture is natural for people," says Marrazzo.

By definition, Handphone is not hands-free, but dialing, picking up and hanging up can be done with voice-activated controls.

■ **TECHNOLOGY TIMELINE:**
Available now

The **P-Per** is a thin device that looks like two iPhones glued together. "It has a [touch] screen on each of its two sides," says Karole Ye of independent design firm Chocolate Agency, in Shenzhen, China. "Mobile phone and messaging are on one, and a camera on the other."

■ **TECHNOLOGY TIMELINE:**
Three or four years

Istanbul, Turkey-based designer Emir Rifat Isik's **Packet** phone is a foldable device that's about a centimeter thick and just 5 centimeters (about 2 inches) square when it's folded up.

"The idea was to put all the possible functions in the smallest area and make them easy to use," says Isik.

If you fold open the top and bottom squares, the Packet looks like a traditional flip phone with a speaker and screen at the top, a microphone at the bottom and a dial pad in the middle.

If you want to type an e-mail or surf the Web, you fold open the two sides to create a cross-shaped smart phone. There's a split keyboard at the sides, a pointer at the center and a screen at the top. "All interaction will be by touching the screens," says Isik.

■ **TECHNOLOGY TIMELINE:**
A couple of years

James Scott, a researcher at Microsoft Research Cambridge in England, is developing a phone with force sensors embedded at corners so that hand actions like stretching, squeezing and bending can be used as commands. For instance, you could turn the phone on and off by squeezing or pulling it, or advance a Web page by twisting the device.

One of the advantages of this technology is that it saves space because there's no need for push buttons, Scott says. That leaves more room for the screen.

■ **TECHNOLOGY TIMELINE:**
A decade, if the research pans out

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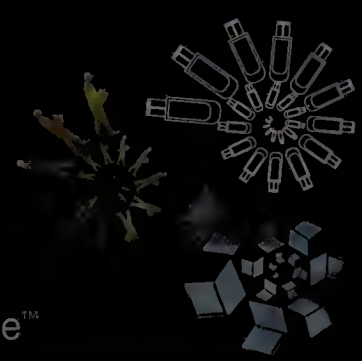

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How would you like a phone that doesn't run out of power — or at least can run much longer than current phones without being recharged?

Ricardo Baiao of Lisbon, Portugal, who works for Cincinnati-based Designer-ID, is taking an interesting approach to developing such a device. His **Atlas Kinetic** concept phone will draw power from the motions the user makes while walking, running or even sitting down.

Like the self-winding watches of the 1960s, it has built-in weights, rotors and springs that generate power whenever it's shaken or moved. That power runs a generator that charges the battery.

A number of other creative approaches to powering phones are also emerging. For instance, Apple recently received a patent for a unique solar-powered phone. The device's screen would generate power with invisible photovoltaic layers that would gather the sun's light — or a room's artificial lighting.

■ **TECHNOLOGY TIMELINE:**
Unknown

The designs of the phones of tomorrow are limited only by the imaginations of today's developers, who are constantly looking for new and innovative ways to put together the necessary software and hardware.

"Big improvements in phone technology are coming," IDC's Bakhshi says. "What you can imagine today will be possible on a cell phone tomorrow." ■

Nadel *is a freelance writer based near New York and is the former editor in chief of* Mobile Computing & Communications *magazine.*

For Once, Some Incontestable ROI

Return on investment can be **elusive** in infosec. But a **disaster averted** is a blessing in disguise.

RETURN ON investment can be tough to calculate in the realm of information security. Usually, you can't do much more than point to some "soft" ROI, such as an improved security posture for the company or the marketing advantage of being able to tout how secure your products are.

So, I think any security manager would feel good about hitting the ROI jackpot, as we recently did.

The investment in this case was our data leak prevention infrastructure, which we rely on for detecting attempts to send any of our intellectual property out of the company. For a while, the technology was hit-or-miss for us; as with any intrusion-detection software, this technology is prone to false positives until it's tuned properly. That can result in the "boy who cried wolf" syndrome.

The return on this investment came when one of my analysts picked up an indication that one of our employees was sending a company service manual to his personal Web-based e-mail account. Our service manuals (many are in PDF form) are among the crown jewels of our intellectual property. Approximately 35% of our overall revenue comes from servicing the equipment we sell, and our technicians rely on our service manuals when they conduct the various calibrations and measurements related to the proper operation of our tools.

The employee in question worked in one of our Southeast Asian offices. A large portion of our customer base is in Asia, making this potential breach even more significant.

When we have an indication of attempted theft of intellectual property, we immediately begin to journal the suspect's e-mail and review the data stored in his PC's home directory.

■ Evidence of solid, hard-dollar ROI is just what I need as I seek more security investments.

We have no interest in personal e-mails or data, and to narrow down the search, we look for matches of keywords or certain document types.

What we turned up was worrisome, indeed. We found (with the help of an interpreter, since everything was written in a language none of my team speaks) a presentation for attracting investors. His business plan was to offer service to our customers at a discounted rate. In addition, several e-mails suggested he planned to lure many of our company's technicians to work for him.

MORE EVIDENCE

The plot thickened when we looked at the employee's instant messaging traffic. (Employees are informed that their instant messages may be monitored every time they log on.) There were several messages between him and a couple of other employees he was apparently partnering with. And one of their conversations mentioned attempting to partner with one of our competitors to offer service to its customers as well.

All these plans were nipped in the bud. And it's clear that wouldn't have happened if not for the data leak prevention tool. The ROI in this case? Our calculations showed that we stood to lose several million dollars per year in revenue if the employee's plan had gotten off the ground. Our initial investment? About $200,000, including the salary of a full-time analyst.

That sort of solid, hard-dollar ROI is just what I need as I seek more investments. I can now go to my C-level managers and show them the direct value likely to be derived from implementing rights management for our service manuals. You might remember that I implemented Microsoft Rights Management Software a couple of years ago, but it can't be used to protect Adobe PDF files.

Yes, it's definitely an ROI jackpot. I'll let you know whether I get the payoff in the end. ■

This week's journal is written by a real security manager, **"Mathias Thurman,"** *whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com.*

Trouble Ticket

ISSUE: An attempted theft of intellectual property could have cost the company millions.

ACTION PLAN: Leverage the incident for more security investments.

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WHAT DO YOU HAVE TO SAY?

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■ OPINION

Bart Perkins

Management Ducks

DUCKS ARE subpar employees who contribute little to an organization's productivity. My recent column "IT Full of Ducks?" generated many responses from readers reporting ducks in management positions. Ducks are indeed found at *all* levels of an organization, but ducks in management (DIM) are the very worst kind.

DIMs can do big damage in the following ways:

Wasting time. Since they frequently aren't very bright, DIMs often want to revisit issues that others consider closed. Like Dilbert's boss, they have endless questions and call content-free meetings.

Squandering resources. Rather than attempting to do a few things well, DIMs often initiate numerous ill-conceived projects that consume significant financial and employee resources. This defocuses (and frustrates) the organization.

Decreasing effective communication. DIMs often alienate their peers, customers and suppliers, which can significantly damage communication (and cooperation) among organizations. In addition, they frequently blame the bearer of bad news, which can result in fewer problems being addressed.

Damaging your reputation. Employees and peers lose respect for managers who do not spot (and address) DIMs.

De-motivating people. Star employees perform best for people they respect; they hate working for DIMs. Stars always have employment options; many will choose to leave rather than work for a DIM. And it doesn't take employees long to determine their manager's duck rating. (It took my daughter only two days to spot a fifth grade Teacher Duck.) Don't let DIMs drive stars out of your organization!

Unfortunately, it is often difficult for senior management to identify DIMs. It can be problematic to determine whether management objectives have actually been met, since many objectives lack explicit metrics. Moreover, management objectives are frequently subjective, making it hard to meet the often strict HR criteria for firing employees.

■ Stars always have employment options; many will choose to leave rather than work for a duck.

And there are additional obstacles, like these:

■ Busy executives often don't have (or don't take) the time to clearly understand each subordinate manager's performance. If a DIM works in a separate location and "manages up" well, it can take the executive some time to spot him. This is especially difficult in matrixed organizations.

■ Managers are expected to be able to operate independently, against broad objectives. As a result, many executives have limited day-to-day contact with subordinates, letting DIMs fly under the radar.

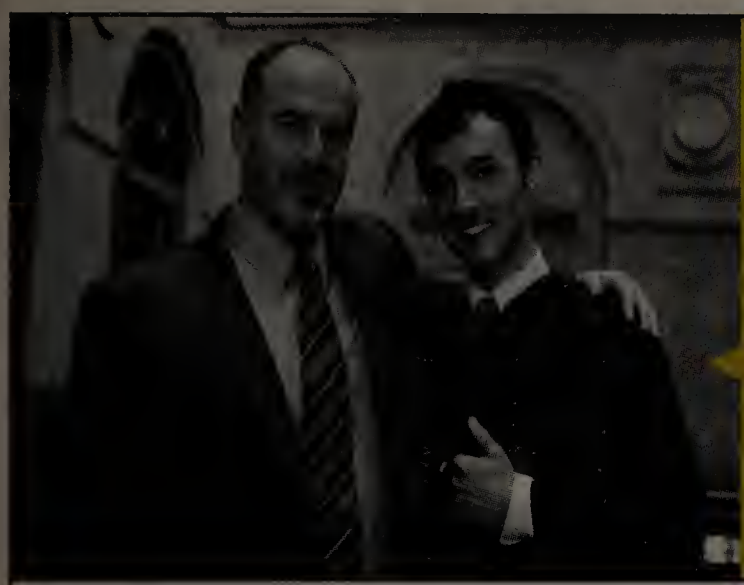
■ Many performance management systems are ineffective, valuing timeliness of submissions rather than thorough investigation and evaluation of performance.

■ Senior executives are sometimes reluctant to shoot subordinate management ducks, because it would take too much time and effort to hire a replacement. HR often requires painful levels of scrutiny and consensus when filling highly compensated management positions.

A comprehensive performance evaluation process provides an effective way to locate ducks. A 360-degree review process combines feedback from an employee's peers, subordinates and manager(s). Some organizations include input from customers, acknowledged stars and other stakeholders. For information on 360-degree reviews, see Wikipedia and the U.S. Office of Personnel Management (*www.opm.gov*). If you can't get rid of DIMs easily, assign them performance objectives they are unlikely to meet. (Most DIMs can't tell the difference.)

It's critical to identify, eliminate and replace DIMs before they do irreparable damage. Corporate downsizing and outsourcing efforts have placed many good managers back on the market (negating the assumption that unemployed managers are ducks). Don't tolerate ducks at any level, especially in management. Search for competent replacements ASAP. Meanwhile, develop internal support for shooting your management ducks. Use a 360-degree review to get your gun into position, then take aim, and fire! ■

Bart Perkins *is managing partner at Louisville, Ky.-based Leverage partners Inc., which helps organizations invest well in IT. Contact him at BartPerkins@LeveragePartners.com.*



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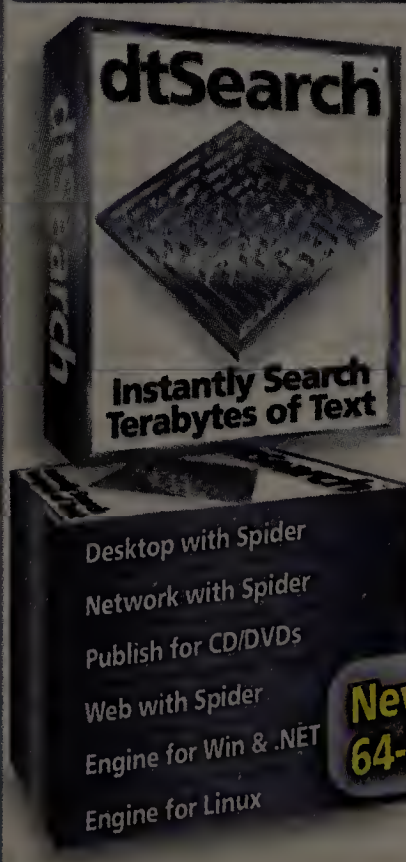

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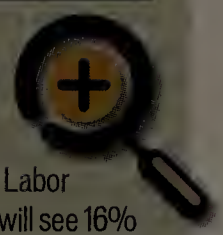
Career Watch

Percentage of female middle managers who aspire to be promoted to a senior management position compared with the number of male middle managers with a similar goal. Moreover, only 22% of women aspire to C-level positions, compared with 31% of men. The most common response from women to the question of what level they would like to achieve was "director" (23%).

[illegible] SURVEY OF OVER 200 FEMALE AND 200 MALE [illegible] BY HUDSON JANUARY 2008

EMPLOYMENT OUTLOOK

Zooming In



Breaking down the BLS's numbers

This page has touted the estimate from the U.S. Bureau of Labor Statistics that "computer and mathematical occupations" will see 16% growth in employment between 2006 and 2016. The spring issue of the ***Occupational Outlook Quarterly*** breaks that down into some specific job categories. The breakdown shows that the overall average could have been higher, but it was held down primarily by non-computer-related classifications, such as "statistician." But it wasn't all good news for computer-related jobs. The ranks of programmers are expected to drop by 18,000 during the decade. According to the BLS, "Advancements in the software development process, the offshoring of jobs and other workers' ability to do some programming" will contribute to that decline.

	2006 employment	Projected change, 2006-16	
		Numeric	Percentage
Computer programmers:	435,000	-18,000	-4%
Computer scientists and database administrators:	542,000	200,000	37%
Computer software engineers:	857,000	325,000	38%
Computer support specialists and systems administrators:	662,000	166,000	18%
Computer system analysts:	504,000	146,000	29%

PAGE COMPILED BY JAMIE ECKLE.

■ **ASK A PREMIER 100 LEADER**

Dale Christian

The CIO at **Avanade Inc.** in Seattle answers questions about communicating with the boss and making the most of a degree in infosec.

The division of the IT department I work in lost a few employees due to attrition last year, and rather than replace those people, management has distributed the workload to me and others. I'm now working 60-plus hours a week, including occasional weekends, and I'm getting burnt out. Do you have any suggestions on how I can approach my supervisor about this? Approach the situation from your supervisor's point of view. She probably doesn't want her team working 60-hour weeks and realizes that it's not a healthy or viable situation. However, she's likely under pressure from management to keep costs down and doesn't have a strong case to justify hiring more people.

So, make a case for her. First, document the problem objectively: Write down the tasks you are expected to perform and how long it takes to do each one – each day, week, month or quarter.

Next, use that list as a basis for discussion: Are there tasks that you can drop, service levels that can be relaxed or efficiencies you can find? You might be able to slim your job down just by focusing on the essentials. Or you might convince her that more people are needed on your team.

In that case, give your supervisor the facts to take the case to her manager. Help her develop a similar list for the rest of your workgroup, laying out what services the team delivers to the company and what resources – people, hardware, software, etc. – are needed to meet those expectations. Then management can decide whether it's worth hiring more people or reducing the services your group provides.

I have a fresh bachelor's degree in information security, a certification in computer networking, eight years in PC troubleshooting maintenance and repair, two years in Internet help desk, and two in PDA and BlackBerry support. I am finding it difficult to break into the IT field full time. Most hiring firms want me for the help desk only. What would you suggest? Call me! Seriously, security skills are valuable. The challenge is that security roles tend to demand deep experience, so you should look for entry-level positions in operations (also called Tier 2 support, production management, systems administration or infrastructure engineering) that will give you hands-on experience in the production infrastructure. Supporting servers, networks and applications will put you in a good position to grow directly in that area. It will also give you opportunities to practice and deepen your experience and move into a security role when the time is right. Good luck!

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QUESTION?
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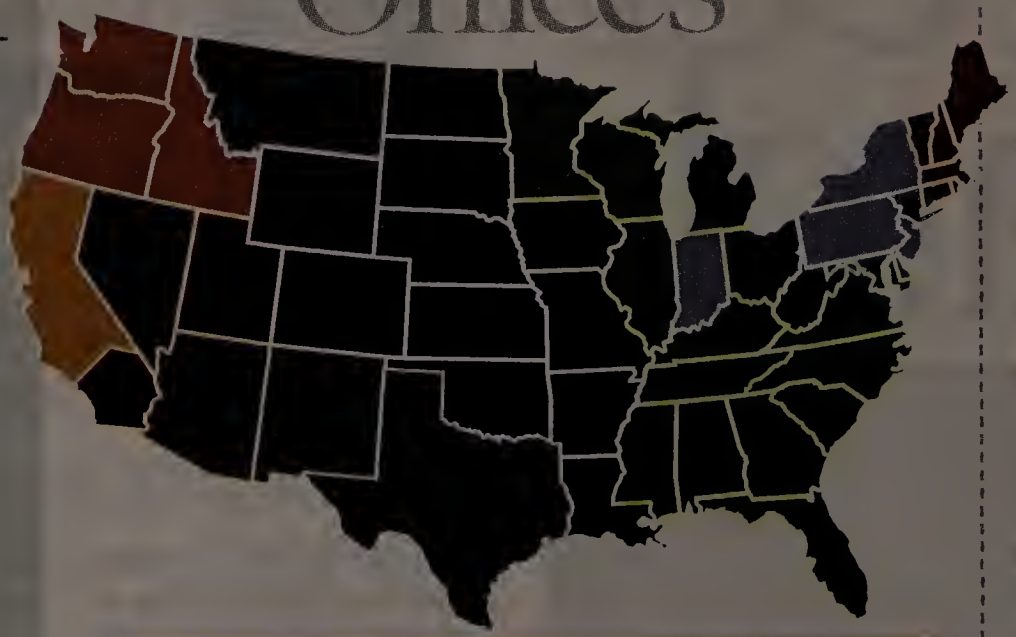

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SharkTank

TRUE TALES OF IT LIFE AS TOLD TO SHARKY

Buh-bye!

It's almost noon, and this pilot fish is leaving his dentist's office after a particularly traumatic root canal when his BlackBerry vibrates. "It's a message from a longtime friend, the VP to whom I reported before his discharge the week before," fish says. "His sudden departure was part of the usual aftermath of a forced sale of the company during involuntary bankruptcy. The message text: 'Check your e-mail when you get a chance.' When I finally get home and look at my company in-box, I find a forwarded note from the HR department with the subject 'Approval required: Involuntary termination.' Because nobody had removed his e-mail account, nor removed him from the approval chain for HR actions, he received a 'Click here to authorize terminating this employee with less than 24 hours' notice' message. The company had absolutely no way to let me know that I had been zapped – the only person on the org chart who could have transmitted this happy news to me had been rendered dead beef a week before."

Priorities

Flashback to August 2003, when the biggest blackout in American history strikes the northeastern U.S. "Power went out in the afternoon, and the UPS and generator kicked in just as they were supposed to," says this pilot fish on the job. "Everything in the data center kept humming along. But the next morning, I received a call that the generator didn't have enough fuel to last through the day, and no one knew how long it would be before power was restored. I made the decision to make an orderly shutdown of all the servers rather than risk them just losing power suddenly. The following Monday, down came the hammer: 'Why did you shut us down for an entire day?' The shipping and warehouse operations on the West Coast were so upset they could not use e-mail or the Internet that they forgot they couldn't use the ERP. I think next time, I'll just let the power drop and see how they like that recovery."

That Must Be It

User's phone goes silent – probably because his line has been "recycled in the course of moving people and desks in his office," says a pilot fish who works close by. "The outside service provider's SLA on installing new lines is more important than that about providing service to existing lines," fish grumbles. "An incident ticket was created. A few days later, his phone was still dead, but the ticket proved to be closed. The resolution? 'Technician reported phone was fixed. I called the user and heard the ring tone, so OK. User did not pick up phone, probably at the coffee machine.' "

Use your coffee break to send Sharky a true tale of IT life at sharky@computerworld.com. You'll snag a snazzy Shark shirt if I use it.

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■ FRANKLY SPEAKING

Frank Hayes

Who Pays?

WHAT DO YOU DO when a network administrator goes bad? That's the question IT staffers for the city of San Francisco are facing this week. One of their own, a net admin named Terry Childs, was arrested for sabotaging the city government's new fiber backbone network (see story, page 6).

Now he's in jail. But he's not the only one who will pay the price.

Until recently, Childs was well regarded in his IT shop. But last month, that all began to unravel. On June 20, Childs reportedly went after the IT department's newly hired head of security, chasing her with a camera until she locked herself in an office to escape.

The security chief was auditing who had password access to the new network. According to the *San Francisco Chronicle*, that audit soon turned up the fact that Childs had changed passwords so that only he had administrative access to the network. Childs also reportedly installed software to monitor his managers' e-mails related to his job performance.

Childs was suspended on July 9 for insubordination. When police asked Childs for the passwords, first he gave them phony information, then he refused to divulge the real passwords. On July 14, Childs was arrested for felony computer tampering.

Because prosecutors feared for the security of law enforcement documents, jail inmate bookings, payroll files and other city, Childs was jailed with bail set at a whopping $5 million.

To date, Childs hasn't explained why he allegedly locked up the network — and he hasn't coughed up the passwords.

Meanwhile, his coworkers are now facing the possibility of having to rebuild the network and verify everything stored on it — about 60% of all government data in San Francisco.

■ Childs hasn't explained why he allegedly locked up the network – and he hasn't coughed up the passwords.

Oh, and also having to live under a cloud for as long as they work in that IT shop. Because someone in their department was trusted too much, they'll be distrusted. By users, managers — and one another.

Is that fair? Of course not. They're not the ones who sabotaged the network and created a huge mess. They're not the ones who should have acted more quickly and effectively when it looked like there was a problem employee on the loose.

But they're the ones who'll pay.

So what to do in the wake of that net admin gone bad? First, there's the fiber backbone to unlock and sanitize, or rebuild if necessary. Then, no doubt, new technology and new layers of auditing will be added to increase security scrutiny.

That's important, but it's not enough. Childs was able to lock up the network because he was, in effect, a one-man show. Setting up a team structure for network administration, in which team members cross-train and rotate through one another's jobs, would make such an occurrence much less likely. It would also help avoid problems when a net admin doesn't go rogue, but gets hit by a bus instead.

No lone wolves. No bottlenecks. Nobody who's indispensable.

Cross-trained teams also make it easy for managers to act swiftly when an employee turns into a problem — there's no hesitation because of worrying about how he'll be immediately replaced. And teams help foster a culture of security; they police themselves in ways no security audit can.

What teams can't do is restore what Terry Childs stripped from his coworkers: the respect and trust of the people who depend on them.

The estimate for rebuilding San Francisco's fiber backbone, if it comes to that, is eight weeks.

But rebuilding respect and trust for San Francisco's IT department? That could take years. ■

Frank Hayes *is* Computerworld's *senior news columnist. Contact him at frank_hayes@computerworld.com.*

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